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# Overview of Early Intervention Services for Schizophrenia

## Module B: Evaluation and Initiation into Treatment

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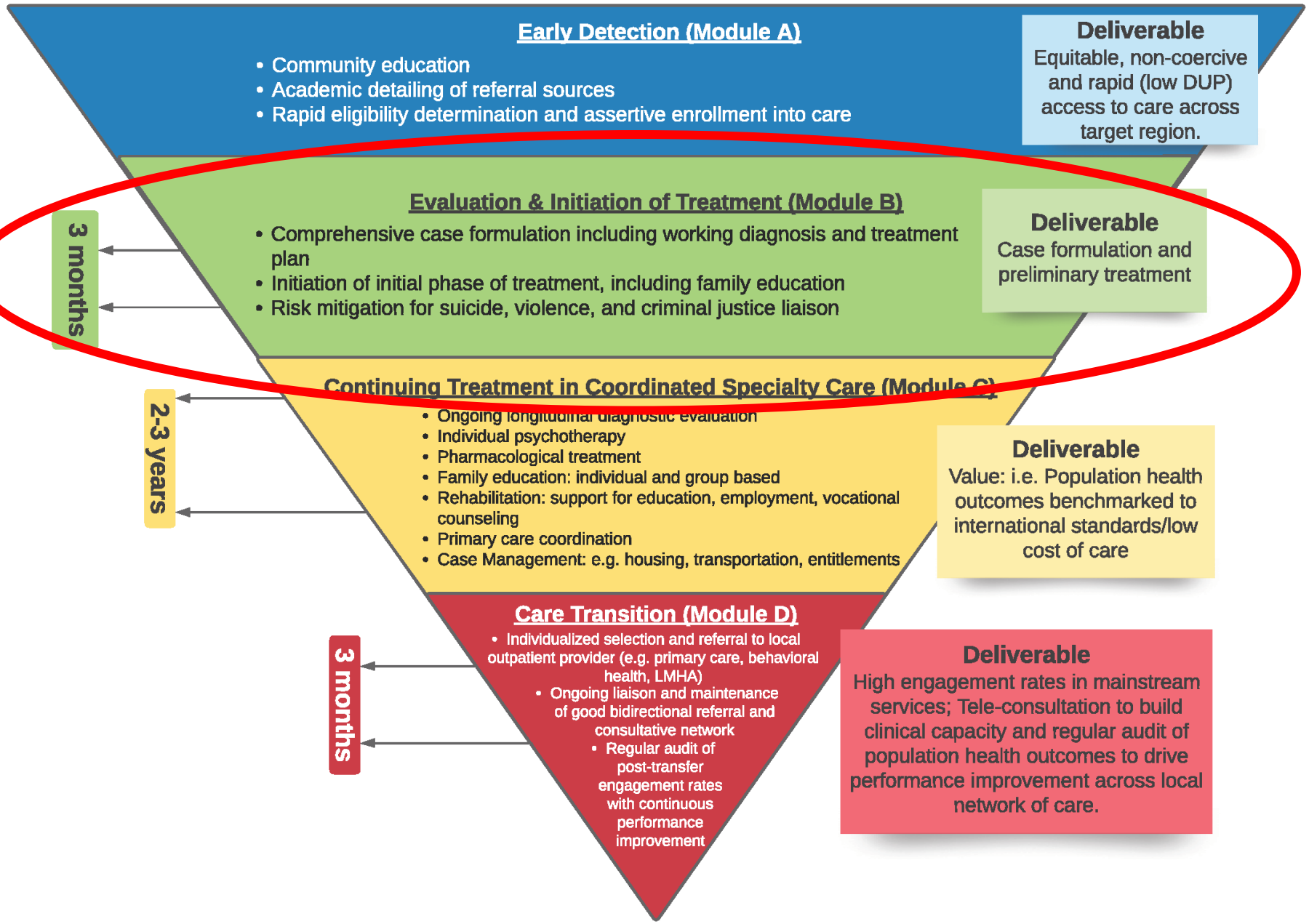
# Early Intervention Service Care Pathway

www.step.yale.edu



# Outline

**Module B:** Evaluation and Initiation into treatment

**Key Concepts:**

1. Differential diagnoses
2. Structured Assessment and Case Formulation
3. Engagement into care model & treatment initiation
4. Family education & support

# Secondary Psychosis

*Crude exogenous organic damage of the most varying kind can produce acute psychotic clinical pictures of a basically uniform kind.*
Karl Bonhoeffer, 1909[1]

Traditional categories of secondary psychosis:

Delirium
Dementia
Illnesses of known etiology/pathophysiology ("Medical")
Substance induced

# Secondary Psychosis

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## *Secondary* Psychosis

- Many, rare causes
- Limits to screening
- High stakes for (some) missed diagnoses

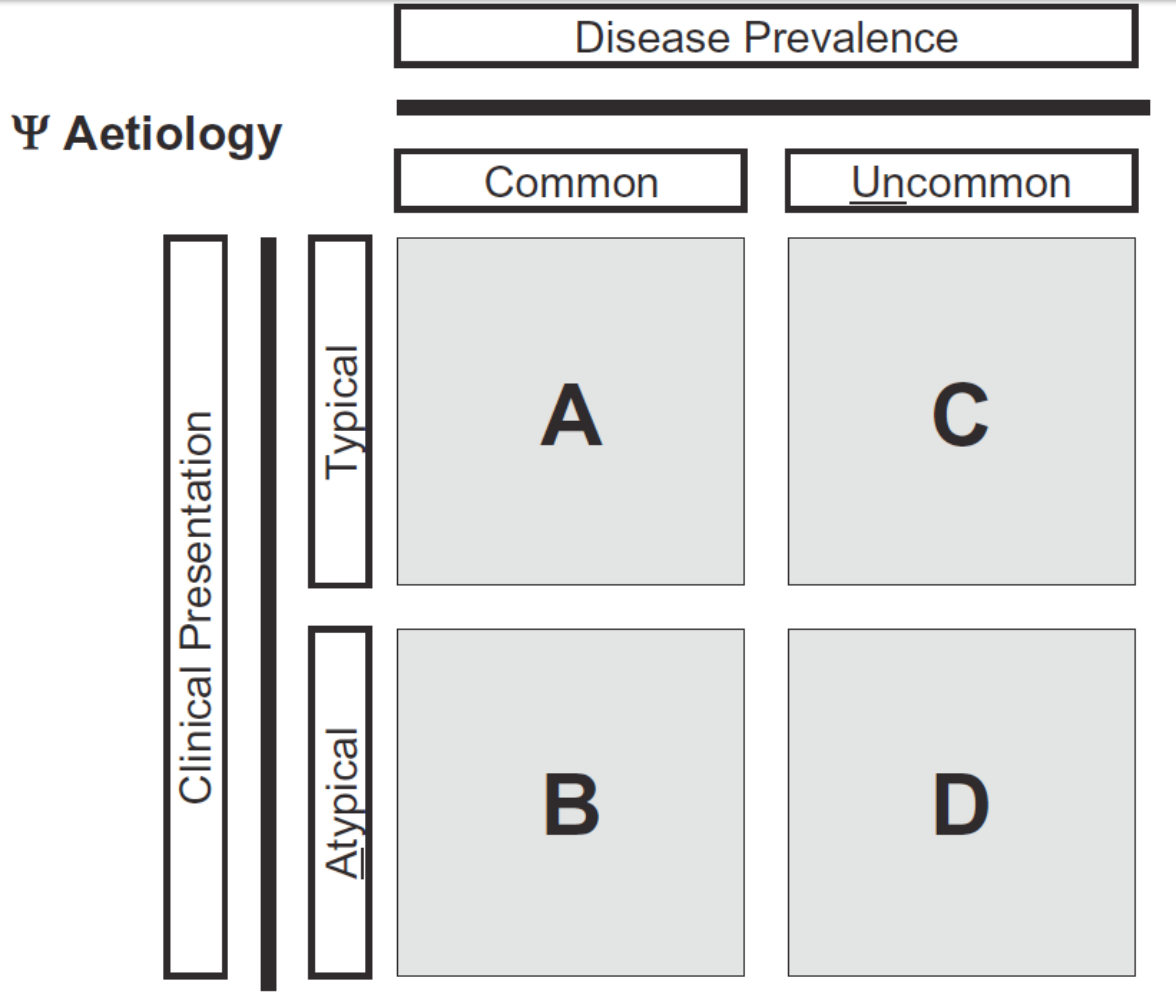
Sources: Coleman & Gillberg (1996), Coleman & Gillberg (1997), Goff et al. (2004), and Hyde & Lewis (2003).

Epilepsy
Head trauma (history of) Dementias
Alzheimer's disease
Pick's disease
Lewy body disease
Stroke (only rarely associated with psychosis)

Psychosis Associated with Medical Diseases

Space-occupying lesions and structural brain abnormalities
Primary brain tumors Secondary brain metastases Brain abscesses and cysts Tuberous sclerosis
Midline abnormalities (e.g., corpus callosum agenesis, cavum septi pellucidi) Cerebrovascular malformations (e.g., involving the temporal lobe)
Hydrocephalus
Demyelinating diseases
Multiple sclerosis (not typically associated with psychosis)
Leukodystrophies (metachromatic leukodystrophy, X-linked adrenoleukodystrophy, Marchiafava-Bignami disease)
Schilder's disease
Neuropsychiatric diseases
Huntington's disease
Wilson's disease
Parkinson's disease (not typically associated with psychosis unless treated)
Familial basal ganglia calcification
Friedreich's ataxia
Autoimmune diseases
Systemic lupus erythematosus Rheumatic fever Paraneoplastic syndrome
Myasthenia gravis
Infections
Viral encephalitis (e.g., herpes simplex, measles [including subacute sclerosing panencephalitis], cytomegalovirus, rubella, Epstein-Barr, varicella) Neurosyphilis
Neuroborreliosis (Lyme disease) HIV infection or AIDS
CNS-invasive parasitic infections (e.g., cerebral malaria, toxoplasmosis, neurocysticercosis) Tuberculosis
Sarcoidosis
Cryptococcus infection
Prion diseases (e.g., Creutzfeldt-Jakob disease) Endocrinopathies
Hypoglycemia Addison's disease Cushing's syndrome
Hyper- and hypothyroidism Hyper- and hypoparathyroidism Hypopituitarism
Narcolepsy
Nutritional deficiencies Magnesium deficiency Vitamin A deficiency Vitamin D deficiency Zinc deficiency
Niacin deficiency (pellagra)
Vitamin $B_{12}$ deficiency (pernicious anemia)
Metabolic diseases (partial list)
Amino acid metabolism (Hartnup disease, homocystinuria, phenylketonuria)
Porphyrias (acute intermittent porphyria, porphyria variegata, hereditary coproporphyria) GM-2 gangliosidosis
Fabry's disease
Niemann-Pick type C disease
Gaucher's disease, adult type
Chromosomal abnormalities
Sex chromosomes (Klinefelter's syndrome, XXX syndrome) Fragile X syndrome
Velocardiofacial syndrome

# Diagnosing Secondary Psychosis: An Approach




In the largest prospective cohort, 3% of 268 had secondary etiologies: neurosyphilis, sarcoidosis, lung ca, autoimmine multi-system disease, cerebral systicersosis, thyrotixicosis

(Johnstone EC, et al. Psychol Med 1987; 17: 371–9)

The choice of test depends on test characteristics AND prevalence of disease

Freudenreich et al. Early Interv Psychiatry 2009; 3:10-18.

# Pragmatic 'Workup' vs Quest for Certainty

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TABLE 5. Medical work-up for first-episode psychosis

Physical exam with emphasis on neurological exam
Vital signs
Weight and height (BMI), waist circumference
ECG (if cardiac risk)

*Laboratory tests*
Broad screening and medical baseline:
- CBC
- Electrolytes including calcium
- Renal function tests (BUN/creatinine)
- Liver function tests
- Erythrocyte sedimentation rate
- Antinuclear antibody
- Fasting glucose
- Lipid profile
- Consider prolactin level
- Consider hepatitis C (if risk factors)
- Pregnancy test (in women of child-bearing age)
- Urine drug screen

Exclude specific treatable disorders:
- TSH
- FTA-ABS (fluorescent treponemal antibody absorbed)
- HIV test
- Ceruloplasmin
- Vitamin B12

*Neuroimaging*
MRI (preferred over CT)

*Ancillary tests*
Expand aetiological search if indicated, taking into account epidemiology:
For example, CXR, EEG, lumbar puncture, karyotype, heavy metal testing
Expand medical monitoring if indicated:
For example, eye exam (if risk factors for cataracts)

Freudenreich et al. Early Interv Psychiatry 2009; 3:10-18.

1. Careful, iterative History and Exam!
2. Test for common disorders, co-morbidities
3. Revisit treatable secondary causes: consider risks/costs of testing but pursue strong suspicions!
4. Test for rare but more easily treatable disorders
5. Establish baseline risk: e.g. cardiovascular, movement disorders, pregnancy testing (and monitor!)

# Primary Psychotic Disorders

## The current *Field-Guide** approach to classification (DSM 5)

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**Non-affective psychotic disorders**

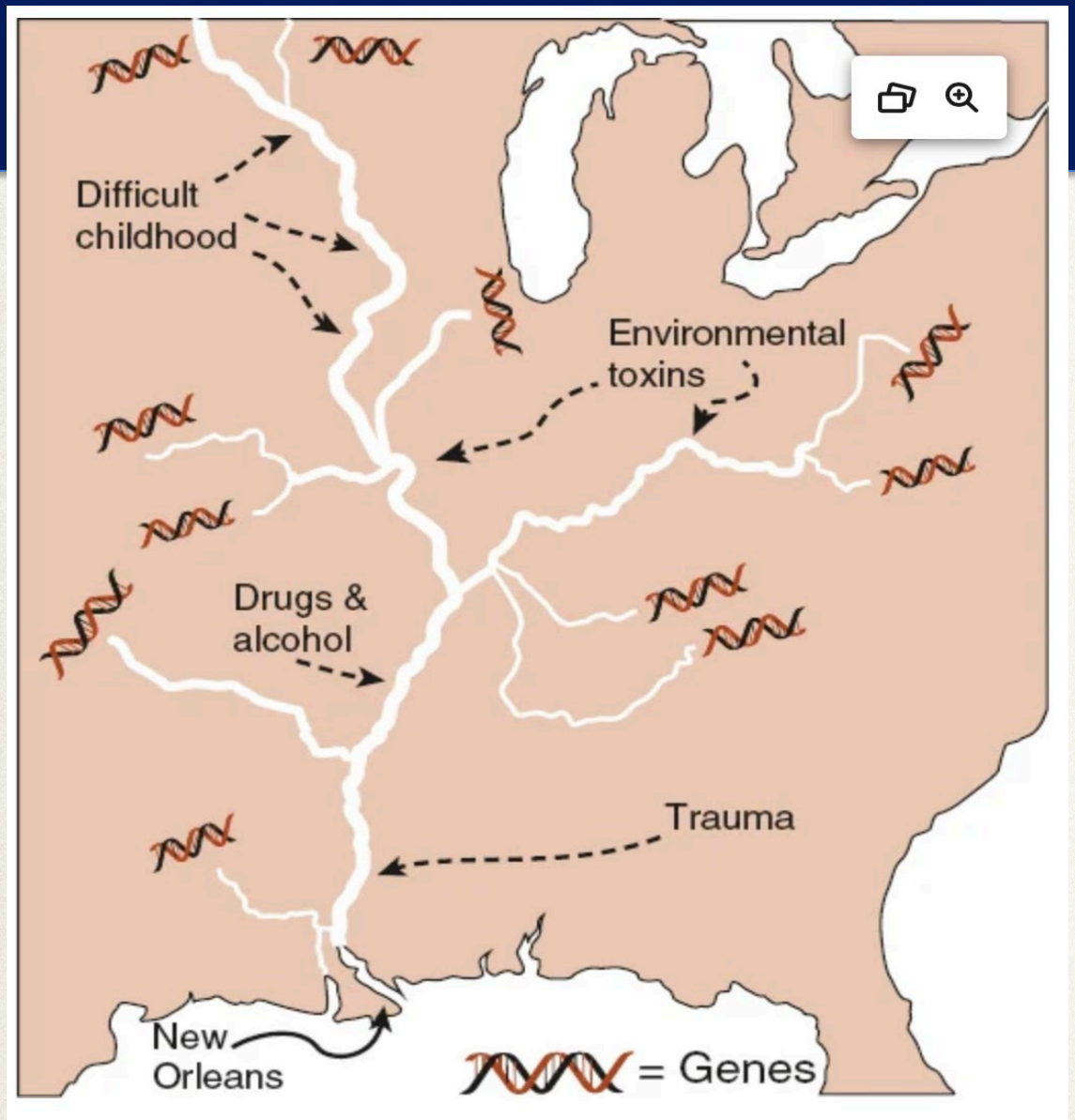
- Schizophrenia
- Schizoaffective disorder
- Schizophreniform disorder
- Delusional disorder
- Brief psychotic disorder/ Schizophreniform disorder
- ~~Psychotic disorder not otherwise specified~~
- Unspecified Schizophrenia Spectrum and Other Psychotic Disorder
- Other specified Schizophrenia Spectrum and Other Psychotic Disorder

The Schizophrenia(s)

**Affective psychoses**

- Bipolar disorder with psychotic features
- Major depressive disorder with psychotic features

*Paul McHugh, NEJM 2012




*The Neuroscience of Clinical Psychiatry. Higgins & George. 2018*

The Schizophrenia(s)
Many causes, ?many diseases, grouped in a clinical syndrome

Heterogeneity: Expect very different presentations, responsiveness to Rx and outcomes !

Formulate each case across multiple perspectives: be multi-lingual

# Case Formulation

- Perspectives in pluralistic case formulation:
  - What does this person have? (Disease Perspective)
  - What does this person do? (Behavioral Perspective)
  - Who is this person? (Dimensional Perspective)
  - What has happened to this person? (Narrative Perspective)

- Data Sources:
- Clinical interactions with patient and family
- Structured assessment by trained raters of symptoms, functioning
- Self-report (substance use, caregiver burden)

# Treatment: The Acute Phase

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- Monitor mental state
- Gain understanding of person and situation as quickly as possible
- **Ensure safety***
- Reduce delay in effective treatment by treating or preventing:
  - Positive sx of psychosis
  - Negative sx and co-occurring issues (substance, anxiety, depression)
- Alliance building with client and family
- Identify tx goals
- Instill hope
- Provide acceptable explanatory model with psychoed
- Engage, support, educate the family

**How to do this?**

- Engage individual (and family) in tx ASAP
- Gather records, collateral
- **Initiate anti-psychotic medication "low and slow"**
- Alliance/be-friending
- Shared goals
- Educating family on crises, how to monitor

Medication in the acute phase

Pharmacotherapy is a first-line treatment for psychotic disorders and therefore a medical practitioner must be involved at the commencement of treatment for FEP. There



(Orygen: Australian Treatment Guidelines)

# What is engagement?

- Clinical attendance / contact
- Treatment adherence (taking prescribed medications)
- Staying involved in treatment as long as recommended (e.g., 2 years)
- Acceptance of need for help
- Strength of therapeutic alliance
- Satisfaction with help received

**No consensus definition in early intervention services on engagement or disengagement…**



(Dixon, Holoshitz, & Nossel, 2016)

# The problem…disengagement

- Disengagement rates range from 12-53% in early intervention programs (Mascayano et al., 2020); 21-40% before 2 years (Doyle et al, 2012)
  - Factors predicting disengagement:
    - Lack of family support
    - Higher substance misuse
    - Living alone
    - Lower medication adherence
    - SDoMH – such as homelessness



(Mascayano et al., 2020; Doyle et al, 2012)

# Strategies for Engagement

- Orient around shared goals and give support right away
  - Give practical assistance (Dixon et al., 2016)
  - "getting back on track" with school, work, or relationships
  - getting relief from distressing symptoms (meds, coping)
- Slow, gradual approach – pace of meeting, safety of topics
  - Be clear, be aware of internal distractors
- Be flexible, responsive, *(timing, duration, rescheduling, location)*…persistent, and young-adult oriented (texting)
- Aim to be normalizing and curious
- Avoid confrontation, don't debate 'reality,' yet avoid collusion
  - *"That must be (stressful, scary, overwhelming, etc.), I imagine it might feel really unsettling to feel like you don't know who you can trust"*

# Strategies for Engagement

- Befriending- (Bendall et al, 2003)
  - May need to focus on "safe" topics: learn about the person's interests, talk with them, learn from them
  - Highlight strengths, positive experiences or memories, pets, vacations
  - Find a likeable quality and compliment or genuinely appreciate this feature
  - Participate in a pleasurable activities- play cards, listen to a song, have a cup of coffee

- May require increased amounts of befriending depending on symptoms
  - Paranoia, Hallucinations, Severe negative symptoms